



Amdt #15

SEQUENCE LISTING

<110> Khan, Nisar A.  
Benner, Robert

*sub  
sc*  
<120> Gene regulator

<130> 2183-5223US

<140> 10/028,075  
<141> 2001-12-21

*BD*  
<150> EP 01203748.7  
<151> 2001-10-04

<160> 175

<170> PatentIn Ver. 2.1

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Pro Gly Cys Pro  
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pdb/1FZV/1FZV-A

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<210> 20  
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Ala Leu Pro Ala Leu Pro  
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<210> 22

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<400> 23

Ala Leu Pro Ala Leu Pro Gln  
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<210> 24

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Val Leu Pro Ala Ala Pro Gln  
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<210> 25

<211> 7

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<400> 25

Val Leu Pro Ala Leu Ala Gln  
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<210> 26

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<400> 26

Leu Ala Gly Val  
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<210> 27

<211> 6

<212> PRT

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Val Leu Ala Ala Leu Pro  
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<210> 28

<211> 6

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<213> Artificial Sequence

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<400> 28  
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<210> 29  
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1 5

<210> 30  
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<210> 31  
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<400> 31  
Val Leu Pro Ala Leu Pro Ala  
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<210> 32  
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<400> 32  
Gly Val Leu Pro Ala Leu Pro

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<210> 33

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Gly Val Leu Pro Ala Leu Pro Gln  
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<210> 34

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<223> Description of Artificial Sequence: oligopeptide

<400> 34

Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys  
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<210> 35

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<223> Description of Artificial Sequence: oligopeptide

<400> 35

Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro  
1 5 10 15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu  
20 25 30

Ser Cys Gln Cys Ala Leu  
35

<210> 36

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<400> 36  
Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys  
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<400> 37  
Glu Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly  
1 5 10 15

Tyr Cys Pro Thr  
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<210> 38  
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Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly  
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Pro Ser

<210> 39  
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Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser  
1 5 10 15

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<400> 40  
Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser  
1 5 10

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<210> 42  
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signalling molecule

<400> 44  
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Cys

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Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys Glu  
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Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr  
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Cys Pro Thr  
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<210> 46  
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Cys Ala Leu Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp  
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His Pro Leu Thr Cys  
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<210> 47  
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<220>  
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Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu  
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Thr Cys

<210> 48

<211> 37

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: peptide  
signalling molecule

<400> 48

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro  
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Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr  
20 25 30

Pro Ile Leu Pro Gln  
35

<210> 49

<211> 10

<212> PRT

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signalling molecule

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Leu Gln Gly Val Leu Pro Ala Leu Pro Gln  
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<210> 50

<211> 10

<212> PRT

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<400> 50

Cys Pro Arg Gly Val Asn Pro Val Val Ser  
1 5 10

<210> 51

<211> 25  
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<400> 52  
Leu Gln Ala Val  
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<210> 53  
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<210> 54  
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pdb/1DE7/1DE7-A

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<210> 55

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pdb/1DL6/1DL6-A

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Leu Asp Ala Leu Pro  
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<210> 56  
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pdb/1QMH/1QMH-A

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<210> 57  
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pdb/1QMH/1QMH-A

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Leu Val Leu Gln Thr Val Leu Pro Ala Leu  
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<210> 58  
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<210> 59

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pdb/1B90/1B90-A

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<210> 63

<211> 4  
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pdb/2KIN/2KIN-B

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<210> 65  
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pdb/1SMP/1SMP-I

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Leu Gln Lys Leu Leu  
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<210> 66  
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pdb/1SMP/1SMP-I

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Pro Glu Ala Pro  
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<210> 67  
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Leu Gln Lys Leu Leu Pro Glu Ala Pro  
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Pro Thr Leu Pro  
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Leu Gln Pro Thr Leu  
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<210> 71  
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Pro Glu Leu Pro  
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<210> 72  
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pdb/1CQK/1CQK-A

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Pro Ala Ala Pro  
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<210> 73  
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pdb/1CQK/1CQK-A

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Pro Ala Ala Pro Gln  
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<210> 74  
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pdb/1CQK/1CQK-A

<400> 74  
Pro Ala Ala Pro Gln Val  
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<210> 75  
<211> 4  
<212> PRT  
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<223> Description of Artificial Sequence: pdb/1BFB/1BFB

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Leu Pro Ala Leu  
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<210> 76  
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<210> 77  
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<400> 77  
Pro Ala Leu Pro Glu  
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<210> 78  
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pdb/1R2A/1R2A-A

<400> 78  
Leu Thr Glu Leu Leu  
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<210> 79  
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<212> PRT  
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<210> 80  
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pdb/1RLQ/1RLQ-R

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<210> 81  
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pdb/1RLQ/1RLQ-R; swissnew/P01229/LSHB HUMAN

<400> 81  
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<210> 82  
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<400> 82  
Leu Pro Gly Leu  
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<210> 83  
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<212> PRT  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1GJS/1GJS-A

<400> 83  
Leu Ala Ala Leu  
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<210> 84  
<211> 5  
<212> PRT  
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<220>  
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pdb/1GJS/1GJS-A

<400> 84  
Leu Ala Ala Leu Pro  
1 5

<210> 85  
<211> 4  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1GBR/1GBR-B

<400> 85  
Pro Lys Leu Pro  
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<210> 86  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1A78/1A78-A

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Val Leu Pro Ser Ile Pro

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5

<210> 87  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1FZV/1FZV-A

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Met Leu Pro Ala Val Pro  
1 5

<210> 88  
<211> 4  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: pdb/1JLI/1JLI

<400> 88  
Leu Pro Cys Leu  
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<210> 89  
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Pro Cys Leu Pro  
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<210> 90  
<211> 5  
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<220>  
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pdb/1HSS/1HSS-A

<400> 90

Val Pro Ala Leu Pro  
1 5

<210> 91

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
pdb/1PRX/1PRX-A

<400> 91

Pro Thr Ile Pro  
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<210> 92

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
pdb/1PRX/1PRX-A

<400> 92

Val Leu Pro Thr Ile Pro  
1 5

<210> 93

<211> 6

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: pdb/1RCY/1RCY

<400> 93

Val Leu Pro Gly Phe Pro  
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<210> 94

<211> 4

<212> PRT

<213> Artificial Sequence

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<400> 94

Pro Gly Phe Pro  
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<210> 95  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1GER/1GER-A

<400> 95  
Leu Pro Ala Leu Pro  
1 5

<210> 96  
<211> 5  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: pdb/1BBS/1BBS

<400> 96  
Met Pro Ala Leu Pro  
1 5

<210> 97  
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<220>  
<223> Description of Artificial Sequence: AI188872

<220>  
<221> MISC  
<222> (2)  
<223> The 'Xaa' at position indicates an unknown amino acid

<400> 97  
Met Xaa Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 98  
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<223> The 'Xaa' at position 2 indicates an unknown amino acid

<400> 98

Met Xaa Arg Val

1

<210> 99

<211> 17

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<223> Description of Artificial Sequence: AI126906

<400> 99

Ile Thr Arg Val Met Gln Gly Val Ile Pro Ala Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 100

<211> 16

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: AI221581

<400> 100

Met Thr Arg Val Leu Gln Val Val Leu Leu Ala Leu Pro Gln Leu Val  
1 5 10 15

<210> 101

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.42246.3

<400> 101

Lys Val Ile Gln Gly Ser Leu Asp Ser Leu Pro Gln Ala Val

1

5

10

<210> 102

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.42246.3

<400> 102

Leu Asp Ser Leu

1

<210> 103

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 103

Val Leu Gln Ala Ile Leu Pro Ser Ala Pro Gln

1

5

10

<210> 104

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 104

Leu Gln Ala Ile Leu

1

5

<210> 105

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 105

Pro Ser Ala Pro

1

<210> 106

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hs.63758.4

<400> 106

Lys Val Leu Gln Gly Arg Leu Pro Ala Val Ala Gln Ala Val  
1 5 10

<210> 107

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hs.63758.4

<400> 107

Leu Pro Ala Val  
1

<210> 108

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 108

Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys  
1 5 10

<210> 109

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 109

Leu Pro Arg Leu  
1

<210> 110

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 110

Pro Met Leu Pro  
1

<210> 111

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 111

Pro Ser Ala Pro Gln  
1 5

<210> 112

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: P20155

<400> 112

Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val  
1 5 10

<210> 113

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Rn.2337.1

<400> 113

Leu Val Gly Cys Pro Arg Asp Tyr Asp Pro Val  
1 5 10

<210> 114

<211> 4

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Rn.2337.1

<400> 114  
Leu Val Gly Cys  
1

<210> 115  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.297775.1

<400> 115  
Pro Gly Cys Pro Arg Gly  
1 5

<210> 116  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.1359.1

<400> 116  
Leu Pro Gly Cys Pro  
1 5

<210> 117  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/056177/056177

<400> 117  
Val Leu Pro Ala Ala Pro  
1 5

<210> 118  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
      sptrembl/Q9W234/Q9W234

<400> 118  
Leu Ala Gly Thr Ile Pro Ala Thr Pro  
      1                  5

<210> 119  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
      sptrembl/Q9W234/Q9W234

<400> 119  
Pro Ala Thr Pro  
      1

<210> 120  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
      sptrembl/Q9IYZ3/Q9IYZ3

<400> 120  
Gly Leu Leu Pro Cys Leu Pro  
      1                  5

<210> 121  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
      sptrembl/Q9PVW5/Q9PVW5

<400> 121  
Pro Gly Ala Pro  
      1

<210> 122  
<211> 10

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9PVW5/Q9PVW5

<400> 122  
Leu Pro Gln Arg Pro Arg Gly Pro Asn Pro  
1 5 10

<210> 123  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9PVW5/Q9PVW5

<400> 123  
Pro Arg Gly Pro  
1

<210> 124  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.303116.2

<400> 124  
Gly Cys Pro Arg  
1

<210> 125  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1DU3/1DU3-A

<400> 125  
Gly Cys Pro Arg Gly Met  
1 5

<210> 126  
<211> 4

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: pdb/1BIO/1BIO

<400> 126  
Leu Gln His Val  
1

<210> 127  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1FL7/1FL7-B

<400> 127  
Val Pro Gly Cys  
1

<210> 128  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1HR6/1HR6-A

<400> 128  
Cys Pro Arg Gly  
1

<210> 129  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:pdb/1H6/1HR6-A

<400> 129  
Leu Lys Gly Cys  
1

<210> 130  
<211> 4  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 130  
Pro Pro Gly Pro  
1

<210> 131  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 131  
Leu Pro Gly Cys Pro Arg Glu Val  
1 5

<210> 132  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 132  
Cys Pro Arg Glu  
1

<210> 133  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 133  
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 134  
<211> 4  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 134

Met Met Arg Val  
1

<210> 135

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 135

Val Leu Pro Pro Leu Pro  
1 5

<210> 136

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 136

Val Leu Pro Pro Leu Pro Gln  
1 5

<210> 137

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 137

Ala Val Leu Pro Pro Leu Pro  
1 5

<210> 138

<211> 8

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 138  
Ala Val Leu Pro Pro Leu Pro Gln  
1 5

<210> 139  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 139  
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Val Pro Gln Val Val  
1 5 10 15

Cys

<210> 140  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 140  
Leu Gln Ala Gly  
1

<210> 141  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 141

Val Leu Pro Pro Val Pro  
1 5

<210> 142  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 142  
Val Leu Pro Pro Val Pro Gln  
1 5

<210> 143  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 143  
Ala Val Leu Pro Pro Val Pro  
1 5

<210> 144  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 144  
Ala Val Leu Pro Pro Val Pro Gln  
1 5

<210> 145  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 145  
Met Thr Arg Asp  
1

<210> 146  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 146  
Gln Asp Val Cys  
1

<210> 147  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 147  
Ile Pro Gly Cys  
1

<210> 148  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9Z284/Q9Z284

<400> 148  
Pro Ala Leu Pro Ser  
1 5

<210> 149  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 149  
Leu Pro Gly Gly Pro Arg  
1 5

<210> 150  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 150  
Leu Pro Gly Gly  
1

<210> 151  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 151  
Gly Gly Pro Arg  
1

<210> 152  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: XP\_028754

<400> 152  
Leu Gln Arg Gly  
1

<210> 153  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: XP\_028754

<400> 153  
Leu Gln Arg Gly Val  
1 5

<210> 154  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: XP\_028754

<400> 154  
Leu Gly Gln Leu  
1

<210> 155  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SignalP (CBS)

<400> 155  
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro  
1 5 10

<210> 156  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 156  
Val Leu Gln Gly Val Leu Pro Ala Leu  
1 5

<210> 157  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 157  
Gly Val Leu Pro Ala Leu Pro Gln Val  
1 5

<210> 158  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 158  
Val Leu Pro Ala Leu Pro Gln Val Val  
1 5

<210> 159  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 159  
Arg Leu Pro Gly Cys Pro Arg Gly Val  
1 5

<210> 160  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 160  
Thr Met Thr Arg Val Leu Gln Gly Val  
1 5

<210> 161  
<211> 15

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: MHC II (H2-Ak  
15-mers)

<400> 161  
Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu  
1 5 10 15

<210> 162  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: MHC II (H2-Ak  
15-mers)

<400> 162  
Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val  
1 5 10 15

<210> 163  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA-DRB1\*0101  
15-mers

<400> 163  
Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser  
1 5 10 15

<210> 164  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA-DRB1\*0101  
15-mers

<400> 164  
Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

<210> 165

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA-DRB1\*0101  
15-mers

<400> 165

Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr  
1 5 10 15

<210> 166

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA-DRB1\*0301  
(DR17) 15-mers

<400> 166

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val  
1 5 10 15

<210> 167

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA-DRB1\*0301  
(DR17) 15-mers

<400> 167

Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val  
1 5 10 15

<210> 168

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-56  
peptide

<400> 168

Val Ala Pro Ala Leu Pro Gln  
1 5

<210> 169

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-62  
peptide

<400> 169

Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro  
1 5 10 15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu  
20 25 30

Ser Cys Gln  
35

<210> 170

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-67  
peptide

<400> 170

Cys Pro Arg Gly Val Asn Pro  
1 5

<210> 171

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-70  
peptide

<400> 171

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln  
1 5 10

<210> 172

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPPF-75  
peptide

<400> 172

Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly  
1 5 10 15

Pro Cys

<210> 173

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPPF-56  
peptide

<400> 173

Val Ala Pro Ala Leu Pro Gln  
1 5

<210> 174

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPPF-71  
peptide

<400> 174

Met Thr Arg Val Leu Pro Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 175

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF peptide

<400> 175

Cys Arg Gly Val Asn Pro Val Val Ser  
1                   5

B2  
Conne